

Application No. 10/604,024
Docket No. 128786
Amendment dated April 21, 2005
Reply to Office Action of January 21, 2005

REMARKS

In the Office Action, the Examiner reviewed claims 1-22 of the above-identified US Patent Application, with the result that all of the claims were rejected under 35 USC §103. In response, Applicants have amended the claims as set forth above. More particularly:

Independent claim 1 has been amended to incorporate limitations of its dependent claim 7, namely, the inner and outer coating layers are metallic, the coating system further includes a ceramic topcoat on the outer metallic coating layer, and the ceramic topcoat and the outer metallic coating layer are simultaneously removed without removing the inner metallic coating layer.

The dependent claims of claim 1 have been reviewed and amended as necessary for consistency with their amended parent claim.

Independent claims 1 and 15 have been amended to expressly recite the steps of forming the coating system, including depositing the outer metallic coating (bond coat) layer to be sufficiently less dense than the inner metallic bond coating (bond coat) layer to enable simultaneous removal of the topcoat and the outer metallic coating (bond coat) layer. Support for this limitation can be found in Applicants' specification at paragraphs [0014] and [0018].

Dependent claims 7 and 21 have been amended to recite that a

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replacement outer metallic coating (bond coat) layer and a replacement ceramic topcoat are deposited on the inner metallic coating (bond coat) layer. Support for this limitation can be found in Applicants' specification at paragraphs [0003] and [0015].

Dependent claims 9-12 have been amended to depend from claim 1 in view of the amendment to their original parent claim 7.

Dependent claim 3 and independent claim 15 have been amended to require that the jet does not contain any abrasive media (is non-abrasive), which finds support in Applicants' specification at paragraph [0015].

Dependent claim 8 has been further amended to recite that the roughened surface of the inner metallic coating layer promotes adhesion of the replacement outer metallic layer to the inner metallic layer. Support for this limitation can be found in Applicants' specification at paragraph [0015].

Applicants believe that the above amendments do not present new matter. Favorable reconsideration and allowance of claims 1-22 are respectfully requested in view of the above amendments and the following remarks.

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Rejection under 35 USC §103

Independent claims 1 and 15 and their dependent claims 2-14 and 16-22 were rejected under 35 USC §103(a) as being unpatentable over Applicants' admitted prior art ("APA") in view of any one of U.S. Patent No. 5,167,721 to McComas et al. (McComas), U.S. Patent No. 5,942,045 to Raghavan et al. (Raghavan), U.S. Patent No. 6,660,102 to Jeutter et al. (Jeutter), and U.S. Patent No. 6,729,940 to Farmer et al. (Farmer). Applicants respectfully request reconsideration of this rejection in view of the following comments.

As recited in Applicants' amended independent claims 1 and 15, Applicants' process entails forming a coating system by depositing an inner metallic coating layer, depositing an outer metallic coating layer on the inner metallic coating layer so that the outer metallic coating layer has the same composition as the inner metallic coating layer but is less dense than the inner metallic coating layer, and then depositing a ceramic topcoat on the outer metallic coating layer. Thereafter, a liquid jet is directed at the coating system so that the topcoat and outer metallic coating layer are simultaneously removed without removing the inner metallic coating layer as a result of the outer metallic coating layer being sufficiently less dense than the inner metallic coating layer.

The APA was cited for disclosing problems associated with "removal

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of an outer coat from an inner coat with past processes," and McComas, Raghavan, Jeutter, and Farmer were cited as motivation "to modify [the] APA by using a liquid jet to remove the outer coating." However, none of the secondary references pertain to removing only one of two metallic coating layers formed of the same material, and none suggest that an outer layer of the two metallic coating layers can be selectively removed (simultaneously with a ceramic layer) by forming the outer layer to be less dense than the inner layer. Therefore, Applicants respectfully believe that the rejection does not fulfill the rule set forth in MPEP §2143, entitled "Basic Requirements of a *Prima Facie* Case of Obviousness," which instructs the following:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The argument for the rejection does not appear to address the second criterion

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("there must be a reasonable expectation of success") - specifically, the rejection does not state on what basis one of ordinary skill in the art would have a reasonable expectation that an outer layer of two metallic coating layers of essentially the same composition could be successfully selectively removed by forming the outer layer to be less dense than the inner layer. Instead, the argument was that "it would have been obvious for one of ordinary skill in the art to modify APA by using a liquid jet to remove the outer coating," which in affect appears to be an "obvious to try" argument. In other words, "[t]he [references] disclose, at most, that one skilled in the art might find it obvious to try the claimed invention. But whether a particular combination might be 'obvious to try' is not a legitimate test of patentability." See MPEP §2145X.B., citing *In re Fine*, 5 USPQ2d 1596, 1599 (Fed. Cir. 1988), citing *In re Geiger*, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987).

Applicants also believe that the prior art fails to suggest a process as recited in claims 7 and 8 (combined) and claim 21, in which the liquid jet simultaneously roughens the surface of the inner layer, yielding a surface to which a replacement outer layer better adheres.

For the above reasons, Applicants respectfully request withdrawal of the rejection to the claims under 35 USC §103(a).


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Closing

In view of the above, Applicants respectfully request that their patent application be given favorable reconsideration.

Should the Examiner have any questions with respect to any matter now of record, Applicants' representative may be reached at (219) 462-4999.

Respectfully submitted,

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